AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1 - 34. (Cancelled)

35. (Currently amended) A method for translating messages in a multi-protocol ~~work machine~~ environment, the method comprising:

receiving, by a gateway, a message in a first data link protocol, the message including:

a first parameter ~~data~~ value in a format~~ted in the~~ consistent with the first protocol; and

a ~~corresponding~~ parameter identifier corresponding to the first parameter value;

extracting the parameter identifier and storing the first parameter ~~data~~ value, by the gateway;

scaling the first parameter ~~data~~ value to a second parameter value consistent with a second data link protocol using a scale factor associated with the second data link protocol~~according to a scale factor associated with a second data link protocol~~; and

transmitting the ~~scaled~~ second parameter ~~data~~ value via the second data link protocol to a destination module.

36. (Currently amended) A method for translating messages in a multi-protocol ~~work machine~~ environment, the method comprising:

receiving, by a gateway, a message in a first data link protocol used by a ~~work~~ machine, the message including a parameter identifier;

matching, by the gateway, the parameter identifier with a corresponding parameter identifier included in a translation table associated with the gateway,

scaling a parameter ~~data~~ value contained in the message to a second parameter value consistent with a second data link protocol using a scale factor associated with the matched parameter identifier ~~using a scale factor corresponding to a second data link protocol~~, and

sending a message including the ~~scaled~~ second parameter ~~data~~ value to a module using the second data link protocol.

37. (Original) The method of claim 36, wherein the first data link protocol is a proprietary data link protocol.

38. (Original) The method of claim 36, wherein the second data link protocol is a non-proprietary protocol including one of a J1939 protocol, a CAN protocol, a MODBUS protocol, a serial standard data link protocol, and an Ethernet protocol.

39. (Currently amended) A system for exchanging information in a multi-protocol ~~work machine~~ environment, the system comprising:

a translation table implemented in a memory device, the translation table including:

at least one parameter identifier,

a plurality of scale factors associated with the at least one parameter identifier, wherein each of the plurality of scale factors corresponds to a different data link protocol, and

a universal storage section for storing a parameter ~~data~~ value associated with the at least one parameter identifier; and

a gateway residing in a ~~work~~ machine configured to access the translation table, wherein the gateway device:

receives a message, including a first parameter identifier and a first parameter ~~data~~ value, from a first data link used by the ~~work~~ machine,

determines whether the first parameter identifier matches the at least one parameter identifier in the translation table,

when a match is found by the gateway, ~~scaling~~ scales the first parameter ~~data~~ value to a second parameter value consistent with a second data link protocol using the scaled factor corresponding to the matched parameter identifier~~one of the plurality of scale factors that corresponds to a second data link protocol~~, and

~~outputting~~ outputs the ~~scaled~~ second parameter ~~data~~ value to a second data link using the second data link protocol.

40. (Original) The system of claim 39, wherein the first data link protocol is a proprietary data link protocol.

41. (Original) The system of claim 39, wherein the first data link protocol is a non-proprietary protocol including one of a J1939 protocol, a CAN protocol, a MODBUS protocol, a serial standard data link protocol, and an Ethernet protocol.

42. (Original) The system of claim 39, wherein the second data link protocol is a non-proprietary protocol including one of a J1939 protocol, a CAN protocol, a MODBUS protocol, a serial standard data link protocol, and an Ethernet protocol.

43. (Cancelled)

44. (Currently amended) A system for exchanging information in a multi-protocol ~~work machine~~ environment including a network of modules, the system comprising:

a source module for sending a source message including content consistent with a first protocol, the source module coupled to a source data link that uses ~~a~~ the first protocol;

a destination module for receiving the source message, the destination module located at a distance from the source module that exceeds a transmission range of the first protocol;

a first gateway coupled to the source data link and an intermediate data link, the intermediate data link using a second protocol, the first gateway configured to:

receive the message from the source data link in the first protocol,

encapsulate the message within a transmission unit consistent with the second protocol, and

output the encapsulated message to the intermediate data link using the second protocol; and

a second gateway coupled to the intermediate data link and the destination module, the second gateway configured to:

receive the encapsulated message from the intermediate data link;

extract the source message from the second protocol transmission unit;

translate content of the source message to a format consistent with a destination protocol different than the first protocol and ~~the extracted message into a comparable message of a destination protocol~~ used by a destination data link coupled to the destination module; and

route the translated message to the destination module over the destination data link.

45. (Cancelled)

46. (Currently amended) A computer-readable medium ~~including instructions~~ storing a computer-readable program for ~~performing a method~~ communication in multi-protocol ~~work machine~~ environment, the ~~method performed~~ computer program executed by a gateway and comprising:

receiving, by a gateway, a message in a first data link protocol used by a ~~work~~ machine, the message including a parameter identifier;

matching, by the gateway, the parameter identifier with a corresponding parameter identifier included in a translation table associated with the gateway[[,]];

scaling a parameter ~~data~~ value contained in the message to a second parameter value consistent with a second data link protocol using a

scale factor associated with the matched parameter identifier ~~using a scale factor corresponding to a second data link protocol~~[[,]]; and

sending a message including the ~~scaled~~ second parameter ~~data~~ value to a module using the second data link protocol.